Game pursuit is usually done on foot, mostly in the winter and very little in the summer. The intense heat of the desert in the summer makes hunting unattractive. The most frequent trophies are the Sonoran bighorn, peccary, cottontail and jack-rabbits. Sometimes, semi-wild burros, running loose on the adjacent extensive Mexican "rancherias", are poached for meat. The peccary is the only animal hunted with the aid of dogs. Large rodents are dispatched by sling-shot, stick, stone, or shot with a .22 caliber rifle. Birds, such as sea-gulls, ducks and pelicans, are clubbed, stoned or shot with a small caliber rifle.

While fishing and hunting are primarily men's occupations, the gathering of the terrestrial and marine animals is almost exclusively women's work. Rattlesnakes and other reptiles are often killed and brought to the encampments by the women from their morning trek into the desert after firewood and fruit. Small fish and marine invertebrates in the tidal pools are collected by women, aided by children of both sexes.

Preparation of meat is quite simple. It is either boiled in hot water with salt added as the only seasoning or else roasted whole, if small enough, over an open fire with or without a grill. The use of spices such as tomato sauce, chili, peppers, and the like, depend upon the tastes of the individuals and also upon the availability of money.

In individual competence as hunters or fishermen the men show a great deal of variability. Some excel in fishing while others do so in hunting. Hand in hand with this, goes the degree of knowledge of the local natural history and, as expected, the best fishermen lead in the knowledge of fishes while the best hunters possess the most extensive knowledge of terrestrial animals and insects. It has also been observed that boys were far ahead of adults in their knowledge of inconspicuous or otherwise commercially unimportant creatures such as insects, obscure marine invertebrates and small fishes. Interest in the commercially or otherwise economically important forms of animals unquestionably becomes overwhelming in adult life while much of the natural history lore learned in youth is forgotten.

Food Preferences and Taboos

A number of animals were reported as being a part of their diet in the past but which were not used at the present time. Several species of shells collected from kitchen middens along the coast were thus identified. In some instances it has been denied that a certain animal was used for food; yet, later when such a beast was brought to the camp, it would be added to the menu. Undoubtedly, some of the species were held in low esteem as food and the Seris preferred not to admit eating them.

Large fishes, especially pinta and baya, sea-turtles, and the very large chuckawalla lizard, which is brought back from rare expeditions to San Esteban Island, are the preferred cuisine. Cochi fish, also called puercos, are disdained. Large catches of these were frequently brought in from the sea, only to be unceremoniously dumped on the beach and left to the dogs and the vultures. But when other fish were scarce, the puercos were eaten. Pelicans, once an

Coyote figures out probably

262 as an important and perhaps disreputable figure in the mythology although nothing but scraps [773] and bits of information suggest this. It is possible that there is actually a taboo on eating this animal or perhaps it is so disreputable that eating its flesh would put a gourmant in an inferior position.

How important is the Seri mammalian diet is hard to tell. It certainly looms more heavily during [224] the winter, because in the cool season hunting is easier than during the heat of the summer and [221] in fact this is when most of it is done by the ardent hunters. Too, winter subjects the Seris to greater hazards and is apt to increase their dependence on the desert resources over that during the summer, even if these resources are scantier at that time.

[136] To all of these animals one should add the semi-wild burros running about the extensive Mexican [224] rancherias. The Indians poach on them frequently using their fire arms, usually the .22 caliber rifles. In any case, it appears that during the summer when the field work was carried out, the mammalian diet figures quite lightly on the Seri table.

252 *Food preparation*: Very little is done in the preparation of the mammalian meat. All that I [263] could observe was the boiling of it in hot water spiced with salt. The Indians were saying that in order to have the meat of a peccary, deer or bighorn ready to eat one must boil it 2-3 hours. The same procedure is followed with the meat of the burros. In contrast to this, as shall be seen later, [251] fish are boiled as well as roasted while the turtles [462] are also dried and salted. Preparation of meat is done by women, certainly at least in the encampments when they are present.

262 *Food preferences*: Some of the Seri food preferences have already been mentioned. At the top of the list as the desirables are the peccary, the deer, the bighorn and the blacktail jackrabbit; at the bottom is the badger, whose meat "is not much good." There is also preference by sex. Females of both the bighorn and peccary are preferred over the males "because they do not have the bad odor like the males." This sort of favoritism also occurs among the Mexicans. However, the Indians did not elaborate beyond this point.

237 *Other economic uses*: Apart from meat, hides 178 are also used. The hides of the deer, bighorn and peccary had been used for sleeping mats although [513] this matter has been expressed in the past tense. Miguel Barnett also suggested that the bighorn [291] hides had been used for clothing by the Indians in the past—but he neglected to say how long ago. During Kroeber's stays, no Seris went about in the animal or bird (pelican) skins but earlier when McGee visited them they went about in these simple garments. Judging then by Miguel's memory, the use of the bighorn hide for clothing must be pushed back to the period of World War I or even earlier.[1]

[1] Miguel Barnett indicated that the "fur" of the bighorn had once been worn for the cold season "but not now."

[P 10 A]

262 tions to San Esteban or San Lorenzo. The turtles
[225] now are as much a food as a "cash crop." While
the Seris are camped at Desemboque, most of the
[439] turtle catch is sold alive to the Mexican fish traders who are headquartered in Nogales and Hermosillo and take the catch along with the fishes to the markets in these towns and sometimes even as far as Phoenix and Tucson.

Of the remainder, the most frequent items that show up on the Seri table are probably the rattlesnakes and the desert tortoises. The rattlers are eaten with relish—only the heads and the tails are discarded as poisonous. The larger chuckawalla is considered a particular delicacy but is rarely caught because it lives in a somewhat distant region. The remainder of the animals listed as "eaten" are collected only incidentially.

It is probable that very few species are really left alone and not taken as food at various times, especially when famine distress overruns the camp. As far as I could determine, only three species are rejected as altogether unfit to eat: the gecko, the night lizard and the toad. All three are believed to be highly toxic "in flesh and blood" although real harm could be caused only by the toad. Besides, the two lizards are really tiny creatures and would make little difference when a survival is at stake.

* 825 Few reptilians are ever used as anything but
food. The sea turtles in a way are at certain times,
[439] that is, when they are sold for hard cash to the
Mexican traders, whether live or sliced and salted.
237 The only other creature I ever heard about as being used for anything at all was the coral snake. At least one informant suggested that in the past its hide has been used for hat decoration. But coral snakes are scarce and this again could be only incidental. It may be that the rattlesnake hide, especially of the large specimens of the western
[439] diamondback, is sold occasionally to a passing visitor but this again is a rare occurance.*

Food Preparation

252 Food preparation of the majority of animals in
this group is no different than of most other ani-
[263] mals. They are simply skinned, tossed into a pot of boiling water and cooked, occasionally with salt as the only ingredient. Larger individuals, notably turtles, will be quartered and then boiled or roasted on a grill. The chuckawalla and the desert tortoise are said to be fried, but whether this is the usual procedure I can't say, because only a few of them had been brought into camp in my presence. The tail of the Gila monster supposedly had been fried in oil "in the past."

Food Preferences and Taboos

262 It is obvious that some creatures in this group
are considered better food than others. The chuck-
awalla is especially favored. When several were brought in from San Esteban, I couldn't persuade the owners to part with them, although I offered a huge price (for local conditions). The captors took

*Another use in the past—snake-skin belt worn. It is illustrated by McGee (1898:170, Fig. 7).

[291]
[P. 23A]

262 now," while the *Volsella* has been eaten in the past
172 just as much as it is now. The find of these four species in great numbers in the kitchen-middens only indicates that they probably were an important part of the Seri past. Historical records are scarce and no archaeology had ever been done in the region, except for Gifford's (as yet unpublished) excavations at Caborca. But Caborca is far away from the coast. Strong circumstantial evidence suggests that a good many of the kitchen-middens represent relics of the Seris' past encampments.

262 The verbal data for the Seris' past use of some species of molluscs in their diet is uncertain or unavailable. But it is safe to assume that if the animal is eaten today, then it certainly had been [174] also eaten in the past. It is not probable that the Seris should suddenly develop a taste for obscure kinds of animal food, while the entire trend had been in the other direction.

Of the different species the augur shell and the cone shell were said to have been "eaten in the past by the giants. Maybe 300-400 years ago." It is [173] hard to account for this idea except that it probably refers to a myth.

Preparation

252 Preparation of the mulluscan food differs little, if at all, from any other food of animal origin. The animals are simply separated from the shell, the meat is dropped in water and boiled, usually for half an hour. Few ingredients other than salt [263] are added and their use depends entirely on the availability of cash and on the individual tastes of the Indians. As far as I could tell, there is no differentiation in this for people of different sexes or ages. Also there is no preference for different 262 parts of the body.

Preferences

Some species are more liked than others, but this is related to their size rather than anything else. There does not appear to be any belief in the toxicity of molluscs and the occasional justification of the inedibility has been expressed in terms of size. Some species, it had been asserted, are not eaten simply because they are too small to bother. Only *Cardium consors*, as one of the in- * [825] formants suggested, is venomous, but even this, to him, seemed uncertain and dubious for he said "maybe it is venomous."

Other Uses

301 a) *Decoration*: A considerable number of shells
* 825 were reported as used for decoration. The tabulation indicated altogether 10 species that had been or still are used for ornament. Three of these are discarded now, seven still in use. This is mostly in the form of various sorts of necklaces, which the women string on ordinary thread. *Solenostira pallida* is supposed to be worn as such by women and children, while *Cerithium stercusmuscarum* by the boys only. But I have never seen either of them make use of it in any way. On the other hand, *Triria radiana* and the *Olive shell* are much

Schalkin E-5 (1953-1955)1962 MU31 Seri MU31

X

INSECTS AND ARACHNOIDS

114 Altogether information has been collected concerning 92 species of insects, scorpions, ticks, myriapods and arachnoids.

Economic uses

262 [114] McGee says that "good many insects" are part of the Seri diet, although he does not specify just which they were nor how significant. There is no doubt that in his days, the insects played some role in the Seris' food and that they were probably far more important in the distant past, in the [177] XVIII and early XIX centuries, before large flocks of livestock, horses and cattle of the Spanish rancheros offered excellent opportunities to supplement the usual diet.

Of all this but minor traces remain today. The Seris even have forgotten which insects had been eaten by their ancestors. Apart from the bees, only the Sphingid caterpillar has been indicated as "eaten in the past, but not now." As for the bees, ● [263] their honey still is part of the Seri diet. But with the availability of sugar, even this addiction dwindles.

→ 825 857 Other than this I have been unable to discover any uses whatever, except perhaps as playthings of little boys, with the usual torture in view. The *Cicada* is most significant of these, of which more later.

Pets

231 [171] The only insect pet is a *Cicada*. This insect is usually tied to a long thread, its forewings partly clipped off and then released into the air like a kite. Local Mexicans also provide their own boys with a similar kind of toy.

Hunting

222 Only bees are hunted. They are usually flushed out of the cave shelters in the mountains. The operation is accomplished without the use of smoke. The honey is cut out with a knife.

Taxonomy

* 825 Seris' ideas of association of various insects are very loose. Few insects are recognized to form natural groupings; bees, butterflies, wasps, spiders are most distinct. However, there are all sorts of gradations blending confusedly with each other, often dependent on the knowledge and interest of particular informants.

Simple recognition is not always present. Out of 92 forms, 13 the informants could not identify, simply saying that they didn't know them. *Cicindela lemniscata*, *Melanotus cribricollis*, *Horistonotus*, *Meloid*, *Oxacis*, both species of *Cymatodera*, *Photopis*, *Scolopaella*, tiny Scarab, *Leptoremus*, *Homolocorus*, and *Reduviid*—all these were in the

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XI

SUMMARY

224 Hunting is very decidedly secondary to fishing, although it is still much practiced by certain individuals and in a desultory way probably by all.

462 There is a clean cut division of labor in all these occupations. Fishing and hunting are men's occupations, gathering of the desert animals and beachcombing for the intertidal animals is largely the job of women and children. Boys get broken [868] into men's occupations in adolescence, girls into women's jobs very much earlier.

224 Avoidance of fishing or hunting certain creatures appears much more a matter of custom than of well defined and socially rationalized attitude. Frequently an animal is not hunted simply because the Seri feel it is too big and too strong for them to tackle.

157 Through all these activities, Seri individualism is curiously woven and accounts for the failure of anything that might resemble a collective effort.

Food Preferences and Preparation

252 Seri food is prepared in a simplest sort of way. [263] Boiling in water is usual with salt and sometimes a few other spices added. While most food is prepared that way, snakes and fishes are usually fried, without any ingredients. There has been a [178] notable shift toward greater fanciness in the ingredients, as they have become more readily available.

262 There are many preferences. Animals are scaled in desirability. Some fishes, marine turtles, chuckawalla, deer and peccary and duck are at the top of the list; lower animals, smaller fishes including puerco in the middle, while the sea gull and the pelican are probably at the very bottom of the pit. This again reflects temporal changes in tastes [178] although not necessarily a direct influence from the Mexicans.

Pets

231 Few pets are kept, other than dogs. Such animals as come are those captured accidentally. In most cases they are bird nestlings.

Taxonomy

825 Differential criteria are applied in the classification of different groups. There is less tendency to group birds than to group different mammals and classificatory ideas break down almost completely in smaller animals, especially insects and molluscs. Considering the economic importance of the molluscs, poor ability to distinguish the Gastropods from the Pelecypods is striking.

The classificatory criteria differ for different groups. Mammals are generally recognized by the furiness, birds by the ability to fly and the pres-

[P.54 B]